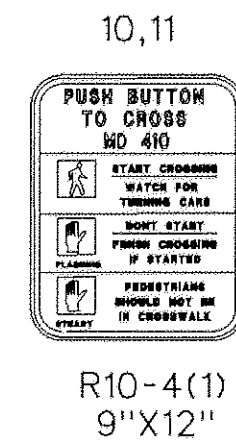
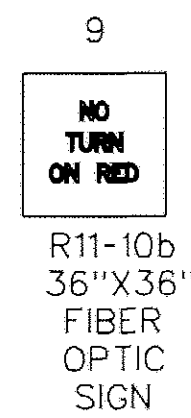
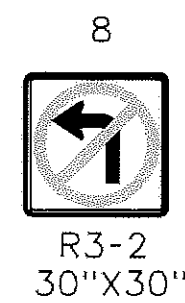
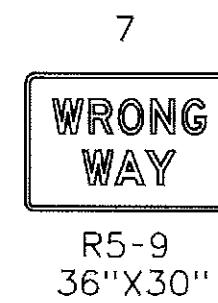


M3-4  
30 in. x 15 in.  
M1-5  
48 in. x 36 in.  
M6-1  
30 in. x 24 in.

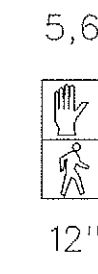
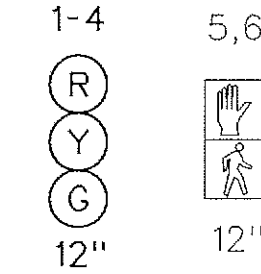
ASSOCIATED  
SHIELD ASSEMBLY  
48 in. x 75 in.

#### SIGNS

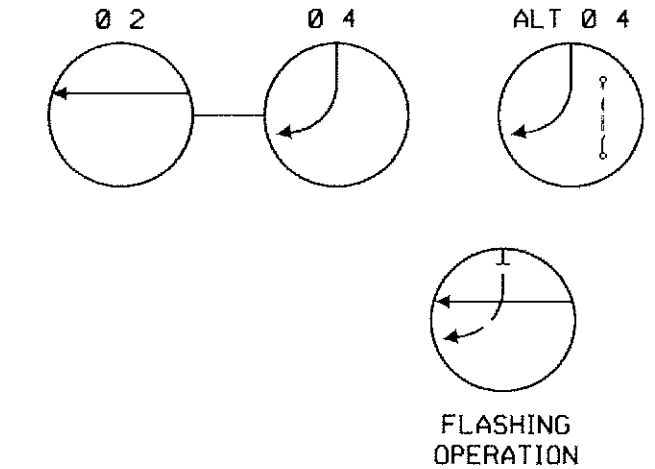


NOTE:  
SIGN 9 IS A PROPOSED FIBER OPTIC SIGN

#### SIGNAL HEADS

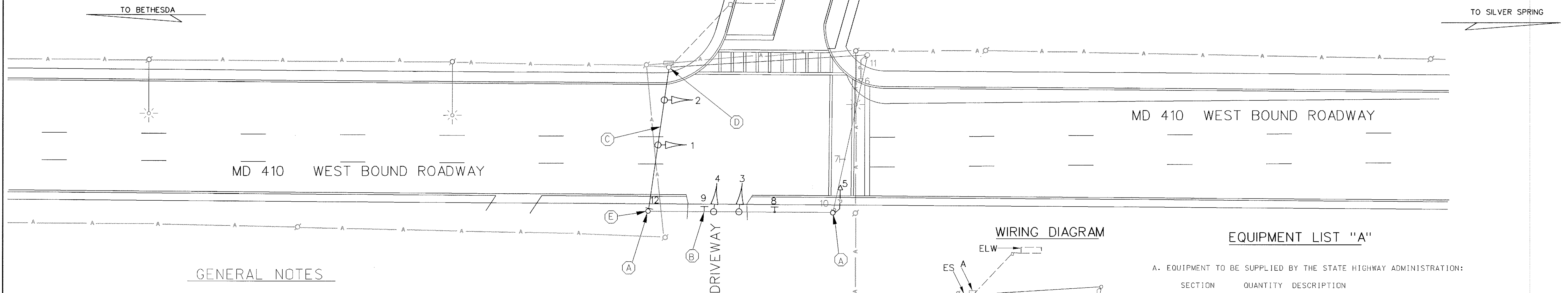


#### NEMA PHASING



#### PHASING NOTES:

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.



#### GENERAL NOTES

1. The signal phasing is to remain the same.
2. The only new wiring to the signal is the cable for the fiber optic sign.

#### PROJECT DESCRIPTION

##### GENERAL:

THIS PROJECT INVOLVES THE ADDITION OF A FIBER OPTIC SIGN "NO TURN ON RED" AT THE EXISTING INTERSECTION TRAFFIC SIGNAL AT MD 410 AND CHELTON ROAD IN MONTGOMERY COUNTY. MD 410 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

##### INTERSECTION OPERATION:

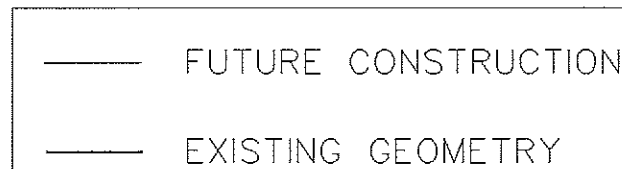
###### 1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA TWO-PHASE, SEMI-TRAFFIC ACTUATED MODE, WITH PEDESTRIAN PHASING BEING PROVIDED TO CROSS MD 410. THE FIBER-OPTIC SIGN WILL BE ON DISPLAY BETWEEN XX:XX AM AND XX:XX PM SCHOOL DAYS ONLY.

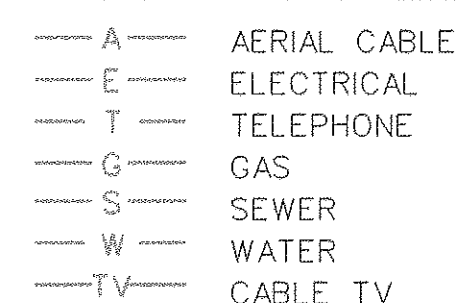
#### CONSTRUCTION DETAILS

- RAISE SPAN OVER DRIVEWAY TO THE TOP OF THE STRAIN POLE AND TIGHTEN THE SAG.
- REMOVE EXISTING SIGN 9 AND INSTALL NEW SIGN 9 AND 1/4" TEATHER WIRE FOR BOTTOM OF NEW SIGN.
- USE EXISTING SPAN WIRE.
- USE EXISTING STRAIN POLE AND WIRE NEW SIGN INTO CONTROLLER CABINET.
- INSTALL POLE MOUNTED SIGN.

#### ROADWAY LEGEND



#### UTILITY LEGEND



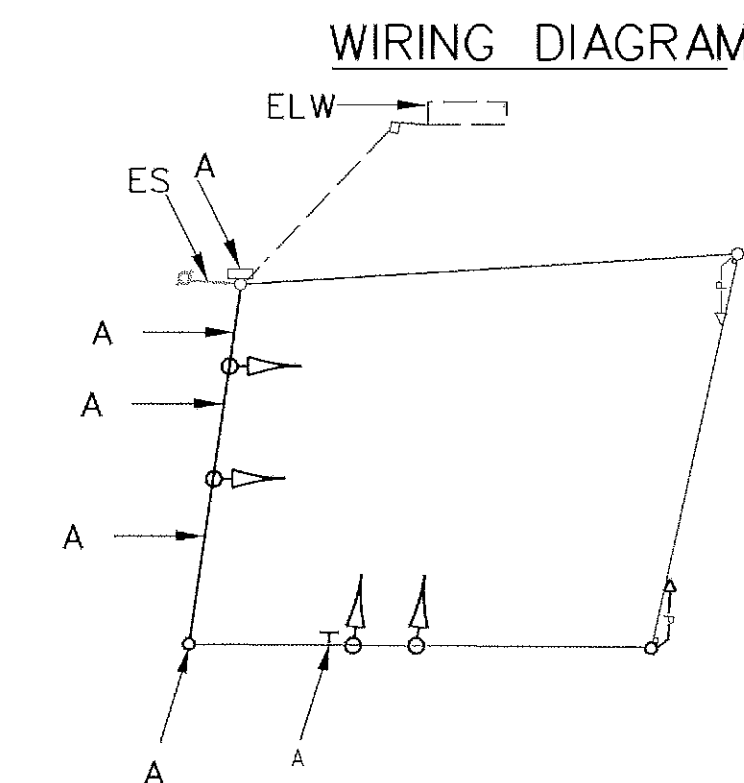
**R&K**  
**RUMMEL, KLEPPER  
& KAHL, LLP**  
CONSULTING ENGINEERS

81 MOSHER STREET  
BALTIMORE, MARYLAND 21217

TEL: (410) 728-2900 FAX: (410) 383-3270

#### PHASE CHART

	1	2	3	4	5	6
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(H) (H) (H)	(H) (H) (H)
PHASE 2	G	G	R	R	DW	DW
2 CHANGE	Y	Y	R	R	DW	DW
PHASE 4	R	R	G	G	DW	DW
4 CHANGE	R	R	Y	Y	DW	DW
PHASE 4 ALT	R	R	G	G	WK	WK
PED CLEAR	R	R	G	G	FL/DW	FL/DW
ALT 4 CHANGE	R	R	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK



#### WIRING KEY

A } 5-CONDUCTOR ELECTRICAL  
CABLE (NO. 14 A.W.G.)

ELW - EXISTING LOOP WIRE (NO. 14 A.W.G.)

ES - EXISTING SERVICE

#### EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION:

SECTION	QUANTITY	DESCRIPTION
9089	25 S.F.	SHEET ALUMINUM SIGNS
	1 EACH	ONE PIECE SHIELD ASSEMBLY ON A BLACK BACKGROUND (48 in. x 75 in.) POLE MOUNT: M3-4 SIGN (30 in. x 15 in.) "WEST" M1-5 SIGN (48 in. x 36 in.) "MARYLAND 410" M6-1 SIGN (30 in. x 24 in.) "DIRECTIONAL ARROW - HORIZONTAL" POLE MOUNT 30x36" "NO TURN ON RED" fiber-optic blanout sign for span mounting
	1 EA	

SS-1

MDOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION

LOG MILE # 15041000.35

DRAWN BY: R. Chaman  
DES. BY: R. Chaman  
CHK. BY: R. W.

MD 410 @ CHELTON ROAD  
SIGNAL DESIGN

COUNTY: MONTGOMERY

DATE: April 8, 1971 F.A.P. NO. N/A

TS/STD. NO.: SHEET NO.

SCALE: 1"=20' S.H.A. NO. N/A

E-71-053A 1 OF 1